

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A system for increasing pilot situational awareness, comprising:
 - a navigational component that determines one or more of an aircraft location and attitude;
 - a scene generator that produces one or more virtual images of the space into which the aircraft is flying based, at least in part, on the aircraft location and/or attitude; and
 - one or more head up displays that display the one or more virtual images to facilitate increasing pilot situational awareness.
2. (Original) A method for mitigating problems associated with spatial disorientation, comprising:
 - computing an aircraft location and attitude;
 - computing a displayable image of the space into which the aircraft is flying based, at least in part, on the aircraft location and attitude; and
 - displaying the image onto one or more head up displays.
3. (Original) An enhanced head up display, comprising:
 - a navigational unit for determining an aircraft location;
 - an attitude unit for determining an aircraft attitude;
 - an image generator for generating one or more first virtual images associated with one or more over-the-nose views and one or more second virtual images associated with one or more out-the-side-window views, where the first and second virtual images are generated, at least in part, based on the aircraft location and aircraft attitude;
 - a first head up display for displaying the one or more first virtual images; and

one or more second head up displays for displaying the one or more second virtual images.

4. (New) The system of claim 1, further comprising:

a terrain database in communication with the scene generator, the terrain database including information associated with the space into which the aircraft is flying;

wherein the virtual image associated with at least one head up display is based at least in part on said information from the terrain database.

5. (New) The method of claim 2, further comprising:

computing the displayable image based at least in part on information from a terrain database, wherein said information from the terrain database is associated with the space into which the aircraft is flying.

6. (New) The head up display of claim 3, further comprising:

a terrain database in communication with the image generator, the terrain database including information associated with a real world;

wherein the virtual image associated with at least one of the first and second head up displays is based at least in part on said information from the terrain database.

7. (New) A display system, comprising:

a navigational system adapted to periodically provide position and velocity information of an aircraft in a real world;

a display processor adapted to receive the aircraft position and velocity information and dynamically produce a plurality of perspective views of a virtual world representative of the real world based at least in part on said aircraft position and velocity information; and

a first display device adapted to dynamically render a first virtual world image depicting a first perspective view of the virtual world from the display processor, wherein the rendered first virtual world image is based at least in part on the aircraft position and velocity information.

8. (New) The display system of claim 7 wherein the first display device is removably secured within a cockpit of the aircraft.
9. (New) The display system of claim 8, the first display device comprising:
a head up display disposed in relation to a cockpit window.
10. (New) The display system of claim 9 wherein the first perspective view is based at least in part on a perspective of a pilot looking out the cockpit window from a cockpit seat.
11. (New) The display system of claim 8, the first display device comprising:
a panel-mounted display disposed in relation to a cockpit instrument panel.
12. (New) The display system of claim 7 wherein the first perspective view of the virtual world is based at least in part on a perspective of a selected camera view of the real world from the aircraft.
13. (New) The display system of claim 7, the navigational system comprising:
a GPS antenna; and
a GPS receiver in communication with the GPS antenna and adapted to provide the aircraft position and velocity information.
14. (New) The display system of claim 13 wherein the navigational system is adapted to periodically determine attitude information for the aircraft with respect to the real world based at least in part on the aircraft velocity information;
wherein the display processor is adapted to receive the aircraft attitude information and the plurality of perspective views of the virtual world are based at least in part on said aircraft attitude information; and
wherein the rendered first virtual world image is based at least in part on the aircraft attitude information.
15. (New) The display system of claim 7, the navigational system comprising:

an inertial navigation system adapted to periodically provide attitude information for the aircraft with respect to the real world as well as the aircraft position and velocity information;

wherein the display processor is adapted to receive the aircraft attitude information and the plurality of perspective views of the virtual world are based at least in part on said aircraft attitude information; and

wherein the rendered first virtual world image is based at least in part on the aircraft attitude information.

16. (New) The display system of claim 7, further comprising:

a second display device adapted to dynamically render a second virtual world image depicting a second perspective view of the virtual world from the display processor, wherein the second perspective view is different from the first perspective view, wherein the rendered second virtual world image is based at least in part on the aircraft position and velocity information.

17. (New) A method of providing a pilot with visual feedback associated with a real world in which an aircraft is located, the method comprising:

a) periodically providing position and velocity information for an aircraft in a real world;

b) dynamically producing a plurality of perspective views of a virtual world representative of the real world based at least in part on the aircraft position and velocity information; and

c) dynamically rendering a first virtual world image depicting a first perspective view of the virtual world representation of the real world on a first display device, wherein the rendered first virtual world image is based at least in part on the aircraft position and velocity information.

18. (New) The method of claim 16, further comprising:

d) removably securing the first display device within a cockpit of the aircraft.

19. (New) The method of claim 17, further comprising:

e) disposing the first display device in relation to a cockpit window.

20. (New) The method of claim 18 wherein the rendering in c) is based at least in part on a perspective of a pilot looking out the cockpit window from a cockpit seat.
21. (New) The method of claim 17, further comprising:
e) disposing the first display device in relation to a cockpit instrument panel.
22. (New) The method of claim 16 wherein the rendering in c) is based at least in part on a perspective of a selected camera view of the real world from the aircraft.
23. (New) The method of claim 16, further comprising:
d) periodically determining attitude information for the aircraft with respect to the real world based at least in part on the aircraft velocity information;
wherein the producing in b) and the rendering in c) are based at least in part on the aircraft attitude information.
24. (New) The method of claim 16, further comprising:
d) periodically providing attitude information for the aircraft with respect to the real world;
wherein the producing in b) and the rendering in c) are based at least in part on the aircraft attitude information.
25. (New) The method of claim 16, further comprising:
d) dynamically rendering a second virtual world image depicting a second perspective view of the virtual world representation of the real world on a second display device, wherein the second perspective view is different from the first perspective view, wherein the rendered second virtual world image is based at least in part on the aircraft position and velocity information.